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THE VALUE OF DIET IN THE PREVENTION OF DISEASE*

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My idea in reading this paper before the Society is more to promote discussion of the value of diet than to present a scientific paper. I personally have been very much interested in the work that Sir Arbuthnot Lane in London is doing in that particular work, and I am an example of it myself because I was very ill a year ago and I have practically become well through diet. I feel that the medical profession should know about it.

This paper is not going to be a long one. My purpose in reading it is more as a reminder to the medical profession of Delaware that we are neglecting one of the most important factors for the prevention of chronic diseases, namely the proper regulation of diet.

The diet of today has become rather a complicated affair. People eat to satisfy their eyes and sense of taste and not for body building. When we consider the type and the quantity of food that people put into their stomachs at one meal it is surprising that the human being lasts as long as he does.

We have recently been worried about the number of comparatively young people that have been carried off by heart disease and nephritis. Several commissions have been formed to investigate its causes and a probable remedy. I say that we need not go any further than the dining table. The average American makes a garbage can out of his stomach. The mixing of proteins and starches at the same meal is criminal. The medical profession should start the missionary work in proper and simplified diet in our schools.

If the diet of the human race should be simplified such surgical diseases as duodenal ulcer, cholecystitis and appendicitis would be nonexistent, for who will deny that they are caused by improper diet? It is a question in my mind whether the disturbances of the endocrines are not due to foolish and improper mode of feeding. We Americans consume entirely too much sugars

and fats and starches. I was very much interested in reading a recent article by a German, where he showed that during the great war when the German population had to subsist on the simplest form of food, heart disease and nephritis decreased considerably; does that not prove that if we simplify our diet these diseases would decrease and in time probably disappear? Let us teach our people to decrease the quantity of meat and sugar and consume more of vegetables and fruits; they would then become one of the healthiest of races in existence. As it is now, sixty per cent of Americans suffer from constipation due to intestinal stasis, which after all is the underlying cause of nephritis, arteriosclerosis and diseases of the myocardium. Intestinal stasis also breaks down the resistance to infectious diseases. Let us simplify our diet.

DISCUSSION

DR. P. W. TOMLINSON (Wilmington): I am glad Dr. Holzman presented this paper. I agree with him that a great many of what I would term "premature deaths" are due to unfortunate or unhappy over-indulgence in diet. I have said for many years that there are far more people who die from excessive eating than from excessive drinking.

I have said, too, I should like another amendment to the Constitution in parallel with the Eighteenth Amendment, that the food should be restricted; that we should be restricted to meat perhaps twice a week, and so on down, and who would rise on their hind legs and paw the air then? None more than the Methodist preachers. I am a Methodist myself and I don't know any bigger gourmandizers than Methodist preachers. They know where the homes are where they have a bountiful table, and if anybody would propose that amendment to the Constitution, I know my Methodist brethren wouldn't stand behind it.

DR. W. E. BIRD (Wilmington): In connection with this whole question, I think it might be apropos to have Dr. Holzman elaborate on his own personal experience. Perhaps I am more responsible for his paper here today than anyone else. Coming up from the shore last summer he happened to meet me on the ferry one day, and

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he was telling me his experience. He had fought chronic nephritis and he was apparently getting little or no benefit, when he happened to fall upon some of Sir Arbuthnot Lane's works on chronic stasis and diet. He began to read a little more, and then followed their advice, and he informed me that the nephritis cleared up.

If he had gone into more detail as to what he did in the previous regime, and exactly what diet regimen he followed, we might get a little more light on his paper. I think it is a very valuable subject.

DR. L. S. CONWELL (Camden): I can remember a few years ago I tackled that proposition, and read a paper before this Society presenting the cause. I think all diseases are hereditary, infectious, or dietetic. I think you could safely go much further than you did when you mentioned appendicitis and duodenal ulcer. I guess that what we eat brings on almost all the degenerative changes of advancing years.

You are a comparatively young man. What I am getting interested in is that I have always been rather careful and my blood pressure has been down to normal until the last few months. I am interested in your subject, and I hoped you would bring out the diet for high blood pressure, for there are others who would like to know about it.

I remember the late Dr. Robin got up after my paper and he said so far as we know now we can't do better than eat what we want and all we want of it, and yet the poor doctor has gone to his reward a little earlier than some of us like to go.

I remember one time I went over to the restaurant here and came by the table where the Medical Board of Examiners were seated. They had selected all the meats—roast beef, and so forth, oysters, crabs, and chicken. There were those fellows going in strong on that and cutting out the vegetables and eating hardly any bread with it. Two or three of those men have fallen down before they reached their seventieth year.

I don't know whether any member of the Society remembers my remark some years ago that we will never find a correct diet unless we happen in the archeological explorations to discover the cook book of Mrs. Methuselah. It would be mighty interesting to know that the time will come when we will be considered gourmands for eating a pound of food at a meal. The time will come, I believe, when the advances of physiological chemistry can tell by the blood and the urine of the individual what particular food is needed,

and perhaps a few teaspoonfuls of the active principles of food will take the place of so much of the crude products. Perhaps that is largely imagination, but I have been wondering about it lately. I have also been wondering what I have done to suddenly cause my blood pressure to go up, but I believe it will turn out to be from other causes than diet. I suppose you would all say focal infection or something of that kind.

DR. TOMLINSON: We know it wasn't hard drink.

DR. CONWELL: You do know it. Indeed you do know that, Dr. Tomlinson.

DR. W. O. LAMOTTE (Wilmington): Mr. President, I believe the overeating side has been emphasized. We all know that disease is caused by vitamin deficiency, such as scurvy and pellagra and many other conditions. If you withhold certain vitamins from rats and monkeys, about 50 per cent of them will develop sinusitis, and the same thing occurs in human beings. That is not generally recognized.

DR. J. W. BASTIAN (Wilmington): We must remember that we are all little laboratories and we have quite a great many individual peculiarities in the individual laboratory. What would be meat for one person would be poison for another. There is no doubt, as Dr. Holzman brought out, that almost all of us eat entirely too much, but when we come back to the vitamins, I think a great many have gone vitamin crazy. There is quite a difference in what a rat will thrive on and what a baby will thrive on.

I am asked very frequently for advice as to putting babies on artificial milk or on mother's milk, and if the mother seems to be a healthy woman and capable of nursing her baby, I say, "Well, if you think you have more intelligence than a cow, then nurse your baby." I concede that a great many cows have a great deal more intelligence than some women and therefore these women nurse them on cow's milk. There is no doubt in the world that this has a great deal of influence on the ultimate outcome of that child's growth and development. Dr. Bird is laughing, but that is true. I have delivered a pile of babies.

DR. BIRD: I am just thinking of the new dairy you are about to start, "Milk from Intelligent Cows."

DR. BASTIAN: You see some of the most peculiar diets. I have one friend about seventy-two or seventy-three years old who for the last twenty years has been on a peculiar diet, mostly

of cereals, baked wheat, and other things of that sort. I know him quite well. He did have at one time very ugly stomach trouble so that he was practically incapacitated from work, but today, while he is quite thin, he does an unusual amount of work for a man his age.

I bring this out to show the peculiar conditions of different people's digestive organs, and I think it will take more than one table to work out a diet that will suit all of us.

DR. LEWIS B. FLINN (Wilmington): The question of diet is a trite subject and one about which conclusions cannot be drawn without due consideration of all the facts, and conclusions cannot be drawn too accurately or definitely from the observation of only one case; nevertheless, within recent years definite progress has been made, and certain very definite diseases, for instance the control of diabetes, depend a great deal on diet. Incidentally, too, the ideas on carbohydrates, protein, and fats, are quite different from what they were twenty-five years ago or fifteen years ago and still different from what they were even two years ago.

The tendency now is to give high carbohydrate rather than low. We know very definitely in the feeding of children and of infants, and I don't mean particularly Dr. Bastian's method, that certain children, particularly those with chronic intestinal indigestion, cannot take the ordinary milk. They can take high fat and high protein and no carbohydrate, and there comes a time when they cannot take that. If you add carbohydrate to that mixture, the situation is worse and it is necessary to shift abruptly to low fat, low protein, and high carbohydrate.

Similarly in well-controlled metabolic wards, careful measurement of the amount of protein ingested and the total serum protein can be effected with clear accuracy, so that when it drops below 5 mgs., there is edema, and when it is above that, there is not, and so forth; therefore, it seems to me that Dr. Bird's suggestion that Dr. Holzman give us some more details of this specific instance from which probably we could not draw any general conclusions, but which might conceivably give us all a lead in a certain direction which we could develop later, is a very good one.

DR. L. S. CONWELL (Camden): I didn't intend to touch on temperance today, but I was prodded. I recall when Dr. Tomlinson was president of the State Medical Society he quoted the Scripture one day about Lemuel's mother

advising him to drink a little wine, but I found, "Not for kings to drink wine; nor for princes strong drink," lest it cause them to err in their judgment. It says something about "if you are depressed in spirit (I can't quote it correctly now), take a little, when you are so bad off," for instance, when you have the blues so bad that you can hardly live. But that was the point. I didn't quote all the advice of Lemuel's mother, but she said, "Not for princes."

DR. W. E. BIRD (Wilmington): May I for one moment speak the second time in this matter?

I have two things to say. As the son of a Methodist minister, I say to Dr. Tomlinson I forgive him for the aspersions he cast on the Methodist clergy, and I forgive him because most of what he said is true.

Dr. Conwell, who is fond of quoting the Scripture, spoke of Methuselah, and he wants to dig back into Methuselah's wife's cook book. It seems to be the popular belief that Methuselah lived to be an exceptionally old man. The Bible says somewhere that "his days were as 969 years." It just happens that most of the Biblical scholars are agreed that the word "year" in this phase of Biblical history means from full moon to full moon, and we had thirteen such in a calendar year, so Methuselah lived to be 74½ years old. In another place the Bible says somebody else's "days were as 144 years," but at that phase of Biblical history the word "year" is thought to mean from vernal equinox to autumnal equinox, so that old chap lived to be 72. You see, it takes a highly educated man to read the Bible as understandingly as Dr. Bastian's intelligent cows. Times haven't changed much, so far as the longevity of the human race is concerned, and if you do find Mrs. Methuselah's cook book, you will find recipes that are good for only about seventy-five years.

DR. M. B. HOLZMAN: To answer Dr. Bird, the reason I did not enumerate the diet on which I put myself is that I did not think it would be interesting. The diet that I found not only did me the most good, but also was most helpful with some of my patients, is known as an alkaline diet.

We know there are quite a few foods that are acid producing and again quite a few that are alkaline producing. We also know that every cell in the body is of an alkaline type. It lives better in an alkaline juice, whereas acids destroy it. Starting with that, if you take in a great

deal of acid food, the waste will naturally be acid; the cells will be acid.

In the early years, say up to thirty, the body will take care of that. Perhaps after thirty the cells will not be able to take care of that thing. The result will be more destruction, hence the degenerative diseases.

Our ordinary diet we all know consists of meat, bread, and potatoes, probably topped off by a big piece of pie or a starchy pudding. The other vegetables may be on the table, but as a matter of fact, there is very little of them eaten. It is a proven fact that people who like meat become carnivorous and really do not enjoy the vegetable or fruit foods. They prefer the meat.

All of these acids have to be thrown off by the kidneys and the intestines, or rather the colon and bowel, and we also know that these excreta are acid, proving the fact that the destroyed cell-products are acid. Then, if your diet is more alkaline than acid—I would say 80 per cent or 75 per cent alkaline, that means 80 per cent or 75 per cent of vegetable and fruit content, and the acids, which are proteins mostly, are carried at 20 per cent or 25 per cent—you are on a pretty safe road.

This is the way I have started my diet. Of course, I do not mix starches and proteins at the same time. When I eat meat, which is very seldom, I do not eat bread or potatoes. When I eat potatoes, I do not eat bread or meat. When I eat bread, I do not eat potatoes or meat. I fill the rest of the diet up with vegetables, two raw ones and two or three cooked vegetables. The leaf vegetable is far superior to the root vegetable. It contains more alkali, and the vast majority of the leafy vegetables contain almost all the vitamins.

This vitamin subject, while it has been pooh-poohed, is a very important subject in diet. We know that we can get real fat and still be starving, and I think that is what is happening to a great many of our people. We see a nice fat, robust person at forty-five or forty-eight, and then we find they drop off in heart disease. Such a person has had a fat deficiency, just starving, eating acid foods, not alkalines, not rebuilding themselves, hence the death.

There is another reason. This is not my theory, of course; it is Sir Lane's theory that intestinal stasis produces a nacid-reacting gas or gases. They destroy the nerve cells or the nerves that control the unstriated or involuntary muscular fibres. We can readily see that if a person

eats proteins a great deal and starches that are not digested, he will suffer from these substances putrifying in the intestinal tract and the nerve endings that supply the involuntary muscular fibres do not work. What happens to a muscle that does not work? It simply does not flex. It just extends or dilates, and that is what happens. That is what really is the mechanism of stasis, intestinal or colonic.

The same thing happens with the heart. We have the involuntary muscles on an improper diet. The nerves that apply to those muscles are not acting up to par, and the result is that there is hypotension, which means the myocardium is not working properly; there is not strong enough dilation and there is extreme nerve trouble or nerve strain.

Now in our cases of hypertension, what happens there? Arteriosclerosis. We know that the muscular movements in the blood vessels are involuntary. The same thing happens there.

This, I think, is the answer to these particular kinds of diseases, and to uric acid. Of course, some people will say, "Well, years ago they ate just as much and did just as much and lived a good long time, to a good old age," but years ago we had to work for health. We had to walk three or four miles to school and we had to walk four or five miles to work, probably. We didn't get up in the morning and go down to the front door and get into an automobile which would take us to the office and back again at night; we had exercise.

I venture to say that a great many of our men of good financial standing haven't broken out into a sweat for months and months. Their skin is not active. What is the result? They do not live. They die. They die early. It is surprising the number of men we have lost here recently who have really been a loss to our community.

I want to answer Dr. Conwell about Dr. Robin. Dr. Robin, who had hypertension and also Bright's disease, knew his condition well. We talked of it many times. His idea was a short life and a merry one, but he died after a sumptuous meal, of extreme miasma. Dr. Tarumianz will remember the time. He had fried oysters and apple pie, and I don't remember just all he did have.

DR. TARUMIANZ: He had enough.

DR. HOLZMAN: And when he got home, he died. That is proof positive. I think what I have said pretty nearly answers all the questions.

SOME PHARMACODYNAMIC
CONSIDERATIONS
In Connection With
THE LOCALIZED TREATMENT OF
SO-CALLED HAY FEVER
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Slowly we are learning to appreciate that the etiologic factor involved in so-called hay fever is not limited to a few pollens, but rather that the condition may be caused by a great variety of pollens. Indeed, as pointed out by Bloch¹, hypersensitivity towards pollens and various other substances may be acquired by most of us under suitable conditions.

To the extent that many other sources than grass pollens may produce the symptoms of "hay fever," the term is a misnomer and ought to be eliminated from the nomenclature of scientific medicine. Why? Primarily because as a pathologic entity the condition portrays a manifestation of hypersensitivity, rather than that of a fever such as is produced as a reaction to an infective or thermal agent. Secondarily, because the term "hay fever" is being widely exploited by nostrum vendors to the detriment of the public.

PATHOLOGY

Undoubtedly the chief portal of entrance of the causative agents of so-called hay fever is the nose. According to Hollopeter², during an attack of hay fever the erectile tissues in the nose and the blood vessels become engorged, due probably to venous stasis. The lymphatic spaces and the mucous surface are crowded with leucocytes; the mucous secretion is quantitatively increased and qualitatively altered, and the tissues become extremely hypersensitive.

Although, of course, the pathology of hay fever has its constitutional as well as its local aspects, fortunately the proper localized treatment of the condition may favorably influence both pathologic factors.

The fact that various cutaneous tests for pollen hypersensitivity show a relatively high rate of positive reactions forms reasonable evidence that pollen substances or derivatives are absorbed from the nasal mucous membrane and carried by the circulation.

The consensus of opinion seems to be that these pollen derivatives are protein in nature;

and Cohen³, with his associates, has apparently gone so far as to succeed in measuring the absorption rate of them.

From the preceding brief consideration of the pathology of so-called hay fever, it would seem logical that on this basis alone rational therapeutic measures could be determined. And so they could, were it not for the further fact that it is equally important to consider the physiology and chemistry of the nasal mucous membrane, because the pharmacodynamic properties of many preparations, while admittedly antagonistic towards the pathological factors involved in the condition, may simultaneously be equally antagonistic towards the functions and physiological chemical activities of the structures to which they are to be applied.

PHYSIOLOGICAL AND CHEMICAL FACTORS

Halliburton⁴ states that the nasal mucous membrane is composed of about 90% water, and the mucin it secretes approximately 75%. Moreover, mucin is readily precipitated even by weak acids.

Then, too, Hollopeter² shows that the nasal mucous membrane secretes from 12 to 16 ounces of aqueous mucin daily; while Coolidge⁵ points out that one of the functions of the nasal mucous membrane is to moisten, warm and filter the inhaled air.

In view of these facts, the application of acid-containing oil to the nasal mucous membrane may precipitate the secreted mucin and even clog up the secreting glands themselves if its viscosity is high. Moreover, oils tend to act as insulators which prevent the ready heating of the inhaled air.

Obviously, any medicinal substance, however meritorious it may be in all other respects, if it tends to interfere with the physiologic function of the tissues upon which it acts, then its value as a means of efficient therapy becomes correspondingly diminished.

THERAPEUTIC REQUIREMENTS

In the localized prophylaxis and treatment of so-called hay fever, a preparation is required that is capable of exerting physical protection for the hypersensitive nasal membrane so that the irritating pollens cannot come in direct contact with it. It should also be capable of counteracting any irritation already produced by the pollens by acting as an analgesic to the hypersensitive nerve endings. Last, but not least, such a preparation should also be capable of either diminishing the

the absorption rate of the pollen derivatives, or to prevent absorption altogether.

PHARMACODYNAMIC POINTS

In order to write a prescription that will result in a preparation capable of exerting the desired pharmacotherapeutic action without producing major undesirable side effects, detailed consideration must be given to the following pharmacodynamic points.

Next to the suitability of the drugs selected, the solubility of the ingredients in the vehicle, the solubility of the active ingredients in the tissue fluids, the viscosity, osmotic pressure, surface tension, absorptive properties, hydrogen ion concentration and dissociation properties must be properly balanced to produce a really meritorious preparation from which maximal therapeutic action may be logically anticipated.

The customary preparations used for local mucous membrane medication include drugs having astringent, vasoconstrictor, analgesic, demulcent, and antipathogenic properties, exhibited in oily or aqueous vehicles. Among the more common drugs used are epinephrine, ephedrine, menthol, phenol, chlorbutanol, eucalyptol, and other essential oils.

As a class, it is probable that all of these drugs have some degree of merit for the localized treatment of so-called hay fever. And, yet, the manner in which they are balanced in a given preparation, and especially the vehicle in which they are exhibited, largely determines their therapeutic efficiency.

For example, epinephrine, while acting as a most powerful vasoconstrictor and non-mucinprecipitating astringent, possesses certain very undesirable attributes which greatly diminish its practical usefulness for the localized treatment of so-called hay fever. Its relatively violent but brief action and its tendency to produce undesirable side effects are not its most serious drawbacks. Epinephrine is one of the most sensitive and least stable drugs known. Contact with metals, prolonged exposure to air, heat, and light, as shown by Lieben⁶, may so oxidize epinephrine-containing solutions (as evidenced by their discoloration) so as to render their epinephrine content practically useless from a therapeutic standpoint.

Ephedrine, although somewhat slower acting than epinephrine, is for all practical purposes a most stable drug exerting locally a prolonged epinephrine-like action. Also, ephedrine, or at

least its hydrochloride salt, is far less irritating to the nasal mucosa of most persons than epinephrine.

Most of the essential oils, and chlorbutanol, and phenol are used for their antipathogenic and analgesic properties. In order to exert their best possible synergistic action when used in combination they should be carefully balanced or they lose much of their desirable effects. We should not overlook the important fact at this point that although so-called hay fever is not *per se* a condition caused by micro-organisms, nevertheless it is logical to assume that the irritating pollens produce certain hyperaemic changes in the nasal mucosa which make it more fertile soil for the everpresent host of micro-organisms to multiply upon and produce complicating symptoms.

Preparations intended for nasal mucous membrane application should preferably contain their active ingredients in complete solution, rather than merely in suspension, especially if they contain crystalloids. When merely suspended in an insoluble medium, the active ingredients are unevenly distributed and less concentrated, unit for unit, upon the mucosa to which they are applied, than when held in complete solution. When oils are used, much depends upon the size of the sub-divided oil globules as to how much space is available for oil-insoluble crystalloids to actually come into direct contact with the mucosa between the globules of oil.

Then, too, Drs. Chen and Schmidt⁷ show that ephedrine, an increasingly popular alkaloid used for nasal medication, is not soluble in oils; therefore various expedients have been utilized to make it at least partially oil-soluble. This is usually accomplished by treating the oils with acetyl and other acid radicles. Unfortunately acids, even in dilute form, are mucin-precipitating according to Halliburton and therefore while making ephedrine oil-soluble, probably greatly diminish its therapeutic efficiency by producing a mucin-precipitating and therefore adverse tissue-insulating effect.

While for purely protective purposes tissue incompatibility may not be a serious drawback, when it comes to therapeutic effect to be exercised upon the deeper layers of the nasal mucosa, or the adjacent tissues, then any vehicle which does not permit maximal contact of its contained active ingredients cannot exert the highest possible therapeutic effects.

Moreover, since the tissue fluids and tissue

secretions of the nasal mucous membranes are aqueous in nature, and since oil and water will not mix, any active ingredient held in an oily or fatty suspension is likely to encounter resistance before it is transformed by the laboratory of Nature to penetrate the deeper layers of an aqueous structure. The active ingredients, therefore, of a prescription intended for effect upon the deeper layers of the nasal mucosa should be tissue fluid soluble in order to produce maximal therapeutic efficiency.

VISCOSEITY

In the localized treatment of pollen irritations, the viscosity of a preparation is of considerable practical importance. Primarily and for physical protective purposes alone, the viscosity should be able to enmesh the inhaled pollen much like a spider enmeshes a fly in its web. Secondarily, the viscosity should be such that the contained active ingredients remain in contact with the tissues long enough to permit of their complete absorption. However, in producing the desired viscosity, the medium must not obtain this result at the cost of producing mucin-precipitation by acid radicles or rendering the active medicinal ingredients tissue fluid insoluble.

OSMOTIC PRESSURE

As is well known, when soluble substances come into contact with both sides of a living permeable membrane, Nature seeks to equalize any difference in pressure existing on either side, other things being equal. From a pharmacodynamic standpoint, if a tissue fluid soluble substance exerting a higher osmotic pressure than the tissues is placed in contact therewith, its contained active ingredients are carried from the outside into the tissues as the result of Nature's attempt to restore equilibrium.

Conversely, if a tissue fluid soluble substance exerting a lesser osmotic pressure than the tissues is placed in contact therewith, while possibly here water may exude to restore equilibrium, the activity is too one-sided and the external pressure is inadequate to force by osmotic pressure alone appreciable amounts of medication into the tissues.

SURFACE TENSION

According to Solis-Cohen-Githens⁸, the surface tension which a preparation exerts to a considerable degree influences its powers of absorption. It seems evident that if a tissue fluid insoluble oil or colloid-holding active medication is brought into contact with the nasal mucous membrane,

the finer its particles are subdivided, the less tension it exerts, and everything else being equal, the better are its absorptive qualities. The interglobular spaces between oil globules are relatively large, so that active ingredients dissolved in the oil, or those held between the oil globules in case of oil-insoluble substances, are distributed incompletely and irregularly over the surface of mucous membranes.

Colloids, on the other hand, are generally in a state of much finer subdivision so that active ingredients therein contained are much more evenly distributed over a given surface area than is the case of oils of the type generally used for nasal mucous membrane medication.

But even more than this: if a colloid is water-soluble, it forms a hydrosol which on setting becomes a hydrogel, therefore thicker and more viscid, and capable of more tightly enmeshing offending pollens or dusts than fluid remaining oils.

Then, too, if the hydrosol carries dissolved electrolytic crystalloids, its absorptive powers may be of considerable practical significance before it settles to become a hydrogel, in that it may thereby be capable of combining with the thrown off products of inflammation produced by the irritating pollens. Or, the possibility is by no means excluded that as the result of the interaction of certain colloids and electrolytes the enmeshed pollens may be coated with a chemical film that renders the absorption of their derivatives less likely.

pH VALUE

The hydrogen ion concentration of a preparation intended to be used for the localized treatment of hay fever should be accurately determined and remain constant within narrow limits. A hydrogen ion concentration of any considerable variation from this value on the acid side tends to precipitate mucin, and on the alkaline side to form water-insoluble protein derivatives with the tissues, and consequently hinder penetration.

In preparations in which electrolytic crystalloids are incorporated, much of their ultimate therapeutic effect may be due to their electrolytic dissociation within the tissues. Also, in the case of pollen irritants this electrolytic dissociation may conceivably be utilized to adversely affect the rate of their absorption into the circulation.

At any rate, the hydrogen ion concentration of preparations intended for nasal mucous membrane application for the treatment of so-called hay fever is a matter of no little importance that

demands nicety of pharmacodynamic balance of their ingredients. The hydrogen ion concentration on the one hand must not be too low or mucin precipitation may result; must not be too high, or meta-protein or other water-insoluble protein derivatives may result; and yet, it should be such that free H ions are available for electrolytic dissociation.

Notwithstanding that the preceding incomplete consideration of technicalities involved in nasal mucous membrane medication of a certain type may likewise be applicable to other conditions than for the treatment of pollen irritations, the fact is that they are of the utmost practical value in order to compound a preparation having maximal therapeutic value for these conditions.

It is all well and good to rely upon custom, tradition, or hand-me-down textbook types of formulae in connection with certain types of localized mucous membrane medication; but unless a prescription results in a preparation entirely compatible with the physiologic process and chemistry of the tissues upon which it is intended to act; unless it produces its effect in conformity with the pathology involved; and last but not least, unless the pharmacodynamic properties of its ingredients are properly balanced, rational and maximal pharmacotherapeutic efficiency cannot result. We should strive for as much progress along the lines of therapeutics, as in other lines of scientific medical endeavor.

TO SUMMARIZE:

1. So-called hay fever might better be termed pollen irritation.
2. Its primary portal of entrance is chiefly by way of the nasal passages; consequently proper therapy directed to the nose may act both prophylactically and remedially.
3. The organism may be physically protected from the irritating pollen at the chief portal of entrance by a preparation of proper viscosity capable of enmeshing the pollen much like a spider enmeshes a fly in its web.
4. A proper vehicle not only mechanically protects the hypersensitive nasal mucous membrane from the pollen, but may in addition adversely affect the chemistry of the pollens (which are mostly protein derivatives) to make them water-insoluble and therefore tissue fluid insoluble and less readily absorbed by the circulation.
5. Depending to no inconsiderable degree upon the surface tension and absorptive properties of a given preparation, it is conceded that probably

no preparation is capable of preventing all pollen derivative absorption by the circulation. That being accepted, the addition of non-mucous precipitating and preferably stable astringents and vasoconstrictors form a valuable second line of defense tending to prevent systemic absorption of pollen derivatives.

6. With preparations based on the proper physiologic, chemical, pathologic, pharmacodynamic and pharmacotherapeutic background, the localized treatment of pollen irritations or so-called hay fever becomes a rational and valuable prophylactic and palliative adjunct treatment for this condition. Yes; if thoroughly, faithfully and carefully carried out may even obviate the necessity for systemic treatment; for after all, what does a positive pollen skin test indicate except absorption that ought to have been prevented?

REFERENCES

1. Bloch: Archives of Dermatology and Syphilis, Vol. 19, No. 2.
2. Hollopeter: Hayfever, Its Prevention and Cure.
3. Cohen: Journal of Allergy, Vol. 1—483.
4. Halliburton: Physiology.
5. Coolidge: Diseases of the Nose and Throat.
6. Lieben: Berlin. Klin. Woch., 6—34—163A.
7. Chen & Schmidt: Ephedrine and Related Substances.
8. Solis - Cohen - Githens: Pharmacotherapeutics.

Sussex County Meeting

The Sussex County Medical Society held its monthly meeting at Georgetown, May 14th, 1931, at the New Century Club. Dr. Edward Weiss of Philadelphia was the principal speaker. His subject was "The Classification of Nephritis from a Pathological Standpoint." This was the final program meeting before the summer season. A joint meeting of the Society and the Woman's Auxiliary is to be planned for the summer meeting.

Studies in Thrombo-Angitis Obliterans (Buerger)

Samuel Silbert and Mae Friedlander, New York, (*Journal A. M. A.*, May 30, 1931), made a study of the basal metabolism in fifty cases of thrombo-angitis obliterans, in twelve men who were heavy smokers, and in ten persons with circulatory impairment due to atherosclerosis. An average reading of minus 16.2 per cent was obtained in the patients with thrombo-angitis obliterans. An average of minus 15.1 per cent was obtained in male smokers. The atherosclerosis group showed a metabolism that was normal or slightly above normal. The average reading was plus 9 per cent.

EDITORIAL

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Vol. III

JUNE, 1931

No. 6

O, CONSISTENCY! THOU ART A JEWEL

The daily press of Wilmington has been, for many years past, most generous with its news space when medical measures or medical meetings were news, and for this our sincere thanks. Moreover, all of them, at consistently frequent intervals, have seen fit to devote considerable editorial space to medical items that had a large public appeal, such as cancer, poliomyelitis, diphtheria, etc., and for this our thanks. Not only has valuable space been given, but constructive thought and sympathetic criticism have been tendered, all of which the medical profession has accepted with a full understanding of the spirit behind the word. Furthermore, on more than one occasion, the editors and other members of their staffs, have given their presence, time and efforts to aid some public movement sponsored by their medical friends.

Imagine, then, our surprise to find our

esteemed friends, the *Morning News* and the *Evening Journal*, sponsoring the antics of some "par-optic wizard" who performed, while blindfolded, such stunts as driving an automobile through the city streets, making certain color tests in a paint store, playing pee-wee golf, etc. The whole thing was a corking good example of syndicated publicity, and consisted of a clever manipulation of high-pressure salesmanship and mob psychology. With the above stunting, in these days of depression, we can find no fault: the advertising that creates the demand of today will cause the business revival of tomorrow. Had the *News* and the *Journal* stopped at this point, this editorial would have had no cause for being.

However, our friends went over, body and soul, to chiropractic, despite their recent editorials congratulating Governor Buck on delivering the people of this State from the absurdities of chiropractic by vetoing the chiro bill which had passed both houses of the Legislature. Now, business is business, but we feel chagrined that our good friends of the *News-Journal* organization should offer their readers such choice tidbits concerning this "wizard" as the following excerpt, from the *Journal* of May 8, 1931 (the italics are ours):

Mr. Thompson then gave an interesting talk explaining how the marvelous faculty of developing vision through nerves in the finger tips and the back of the neck had been perfected in his case. He told how in June, 1918, he had been wounded while in the Marine Corps, at Belleau Wood, and as a result of this had suffered a paralytic condition, blindness and loss of memory. He was sent to 46 hospitals for treatment, and was rated by the Government as being totally and permanently disabled.

However, a physician found that while he was completely blind, he was able to detect color. With this as a lead, it was found that Mr. Thompson has the peculiar condition of having only two layers of skin instead of the usual three. Because of this the nerves and the blood vessels both end in the same inner layer, making the nerves acutely sensitive to vibrations. And so was developed the present means of vision being conveyed to the brain and registered as a mental picture through these nerve centers, instead of through the optic nerve, the usual method. One of Mr. Thompson's physicians asserted that this was a latent power which lies dormant in every one and could no doubt be developed in any person having the peculiar skin condition which Mr. Thompson has. An attempt is being made to practice this theory, for the blind, the difficulty being, to produce or find nerves sensitive enough to receive impressions of vibrations acute enough to be visualized.

Mr. Thompson gave the credit of restoring his sight to chiropractic treatment. He explained his

abnormal sense of vision in a matter of fact way, excluding all room for doubt that it was a trick, and explained that by experimenting he found it is necessary for him to fast twenty-four hours before exemplifying the phenomena. It is also necessary, he explained, to have every vestige of light excluded for him to practice par-optic vision.

Immediately dozens of pertinent questions arise in the mind of the alert medical man; questions whose answers must be demonstrated clinically, physiologically, or pathologically before any scientific physician would consent to do more than laugh at the above recital. We have neither the time nor the space to list such questions, but we gladly use both time and space to point out to our erring brethren of the press the fact that such "stories" do great public harm, (1) by giving an air of credibility to the preposterous claims of quacks, in this instance, the chiropractors; and (2) by nullifying their own efforts to educate the people into safe and intelligent channels of public health. Of these two errors, the latter is the graver, for it connotes the further sin of insincerity or deceit.

In the present episode, we feel quite certain that the business office dominated the editorial room—always a dangerous and embarrassing situation. One of these editors is a very distinguished gentleman, whose two sons, in recent years, have graduated from one of America's leading medical schools; he, we are positive, holds no brief for quacks, nor do we doubt the sincerity of his public health efforts, which have been many and valuable. How much greater, then, is the pity that the "dollar diplomacy" of the business office can militate thus against the acknowledged acumen of the editorial room!

We bow our heads in sorrow.

EDITORIAL NOTES

DEAR DOCTOR:

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CHIROPRACTIC: WHY IT FLOURISHES IN ARIZONA AND FAILS IN DELAWARE

That species of quackery known as "chiropractic" flourishes like a green bay tree in Ari-

zona. The reason for that is the lack of fundamental information among the people of the state and the failure to exercise any great measure of intelligence on the part of legislators. Several years ago the chiropractors succeeded in fooling the legislature into creating a separate licensing board for them, so that they could examine themselves and license themselves. In the hearing on that bill, the representatives of the medical profession agreed that the chiropractors might do whatever they pleased, so long as they might be forbidden to use the name "Doctor," or to hold themselves out, in any manner, as directly or remotely connected with the practice of medicine. In some manner, after this was agreed upon in the committee, the provision was dropped from the bill. In Arizona, today, it requires a well-educated person to distinguish from the newspaper reference between "Dr. So-and-So" who is not a doctor but a chiropractor, and "Dr. X" who is a bona fide member of the medical profession. A recent news item in the *Arizona Republic*, of Phoenix, referred to an accident to a chiropractor with the heading "Physician Injured." It is that type of education by news articles which trains people into an inability to distinguish between an honorable profession and a brand of quackery from which the public should be protected.

As to Delaware, we quote an editorial from the *A. M. A. Journal* of April 4, 1931. The comparison will be obvious:

"Governor Buck of Delaware has returned to the legislature, without his approval, a bill to create a board of chiropractic examiners and to regulate the practice of chiropractic. His summarization of the reason for his veto is so clear and terse that it should be read by the legislators and governors of every state that is threatened or already afflicted with this cult. His statement follows:

The purpose of the act, as I understand it, is to legalize the practice of chiropractic in this state. Practitioners of this cult are not recognized now. Do they profess to be doctors in the same sense of the term as is commonly understood to apply to men and women of the medical profession? Insofar as I am able to determine, there is not a recognized medical school in the country that includes in its curriculum a course in chiropractic. This fact in itself seems singularly significant.

Even to the lay mind the idea that all disease of

whatever character is due to spinal displacements of a mild sort, and that cures of such ailments as tuberculosis, smallpox, diphtheria, scarlet fever and others can be effected by manipulation and fingering of the spine is preposterous.

Before returning this bill to you I have satisfied myself that the training and education a chiropractor, or drugless healer, needs to practice his art does not fit him properly to advisedly treat the sick, inasmuch as he is not qualified to diagnose ailments nor recognize communicable diseases and to take measure to control them. He is therefore an opponent to the department of health.

Wherefore, it seems to me it would be inconsistent for the legislature to appropriate, as it will do, money for the state board of health, which board is trying to eradicate communicable diseases, and at the same time legalize the practice of a cult which does not believe in the germ theory of a disease but does teach and believe that such diseases as scarlet fever, etc., are due to a distracted vertebra and the method to prevent and cure such disease is to see that everybody has a normal spine."—Editorial, *Southwest Med.*, May, 1931.

In Iowa the assistant attorney-general has held that a chiropractor or osteopath may certify children to be non-infectious from a communicable disease and that the certificate must be given the same weight by a board of education as one made by a physician. Isn't that sweet? Some of the barbers, elevator men, and laborers of one kind or another, following a few weeks of training (?) in a so-called chiropractic school are permitted to practice medicine in some states, and of course not one of them knows anything more than a rabbit about communicable diseases or the bacteriology or pathology of any abnormal condition, and yet the opinion of such an incompetent, which may have an important bearing upon the health of the community, is to be given the same weight as the opinion of a regular physician who has had two years of university work, four years of nine months each in a medical school, and an additional year as intern in a general hospital. Why have any education if a premium is placed upon ignorance and incompetency?—Editorial, *Jour. Ind. St. Med. Ass'n.*, April, 1931.

THE OMNISCIENT ARTHUR BRISBANE

For the first time the omniscient Brisbane breaks over from the Tonics and Sedatives de-

partment of *The Journal* into the editorial sections. The omniscient columnists never hesitates to comment on any medical subject, and almost invariably he is wrong. An engineer might admit that the omniscient one is right about everything except engineering, or a chemist might grant the authoritative character of the omniscient Brisbane's remarks so far as they concern everything but chemistry. Apparently, omniscient as he is, the great Brisbane overlooked the Wig-gam criterion which defined the recognition of expert knowledge as one of the marks of an educated man. These tender locutions are prompted by a recent comment of the omniscient Brisbane relative to the pseudomedical cult called osteopathy. After calling attention to the fact that osteopaths are celebrating a "normal spine week," the omniscient one proceeded:

"Osteopaths today take the place of doctors and doctors cannot do what osteopaths do, because they haven't learned that in the human body the skeleton is as important as the steel frame in a skyscraper. It is as dangerous to have a bone pinching a nerve as it would be to have an iron beam cutting off an electric light wire, or a water pipe. Mayor Walker, of New York, on his way west for a rest from overwork, stopped in Chicago for an osteopathic treatment. Wise mayor."

By a fatalistic coincidence which omniscience might have anticipated, the eulogy of Mayor Walker appeared on the same day that a group of indignant citizens petitioned the governor of New York for his removal. This, of course, has nothing whatever to do with osteopathy. The analogy between pinching the nerve and an occluded water pipe is a typical Brisbane analogy: he makes science so simple that his comments are perfect for the simple-minded.—Editorial, *Jour. A. M. A.*, April 25, 1931.

MOUTH WASHES

In view of the present widespread publicity being given to "so-called" antiseptic mouth washes, it is well to keep in mind their chemical composition and their lack of antiseptic value. Two of those most widely exploited are "Listerine" and "Pepsodent Antiseptic."

A recent report from the chemical laboratory of the American Medical Association shows: "the composition of Listerine is essentially that of a solution containing 25 per cent of alcohol, 2.4 per cent of boric acid, 0.4 per cent of benzoic

acid, with aromatic substances, chiefly thymol, (about 0.75 per cent). . . . "Four hundred and ninety-five dollars' worth of Listerine has the antiseptic action of a cent's worth of corrosive sublimate; or fifteen dollars' worth of Listerine equal's a cent's worth of carbolic acid." . . . "If a physician desires to prescribe a complex weakly antiseptic mouth wash—and this is not recommended—he has at his disposal the well-known and non-secret Antiseptic Solution N. F. (Liquid Antisepticus").

Pepsodent Antiseptic contains 25 per cent alcohol, 10 per cent glycerine, 10 per cent boric acid, 0.2 per cent chlorthymol, 0.2 per cent benzoic acid and traces of citric acid, tartaric acid, flavor and coloring matter. "The phenol coefficient of Pepsodent Antiseptic is ridiculously low: 0.15."—Editorial, *J. Med. Asso. Ga.*, May, 1931.

Next to "standardization," the greatest shibboleth of the present age is "control." We have birth control for the women, girth control for the men, and mirth control for the children. Now that business is dull and money tight, let the wiseacres tackle dearth control, and after that, worth control.

So It Is—SOMETIMES

Dr. Tomlinson will represent the Delaware State Medical Society in the House of Delegates, the law making rf rf rf rfrf rffshrdlu dwly dwdwdd body of the American Medical Society, which will hold its annual convention in Philadelphia all of next week—*Every Evening*, June 6, 1931.

Intervertebral Disk

Emil S. Geist, Minneapolis (*Journal A. M. A.*, May 16, 1931), demonstrates in the light of Schmorl's work, the anatomy, physiology and pathology of the intervertebral disk and calls attention to clinical deductions drawn therefrom in the recent literature as well as from clinical experience. He believes that this is of importance to the orthopedic surgeon, the compensation adjuster and the roentgenologist. He discusses pathologic conditions of the spine in which the disk plays the pre-eminent part, and pathologic conditions of the spine in which the pathologic changes of the disk are of secondary nature.

DELAWARE PHARMACEUTICAL SOCIETY

The Increasing Burden of Pharmaceutical Specialties

L. M. KANTNER

Almost twenty-five years ago a pharmacist in a small town predicted the time was not far distant when physicians would prescribe almost exclusively preparations known as specialties produced by the manufacturing pharmaceutical specialty houses.

We have not witnessed the exclusive use of these preparations, known as specialties, but from about that time on much progress has been made by the manufacturers in making their products popular with the medical profession, to such an extent that the Red Book and manufacturers' catalogue are more useful in the average pharmacy than the U. S. P. or N. F.

Many of these preparations are popular for a short time and are forgotten by the physician or the results expected do not come up to expectations or desires and their use discontinued, the pharmacist being left with a stock of such preparations on his shelves, which are eventually discarded into the sewer, possibly to make room for new ones.

Certain periods of time seemingly have their fads for the production of different classes of medical preparations, and often seem as ridiculous as the fads of women's dresses. If one will reflect, at one time one preparation or class of preparations have a very extensive demand and at another a different class, the result obtained not coming up to the claims made for them as to their effectiveness. There can be no criticism to research work or the production of preparations that have a needed place in the administration of medicines that will prevent, alleviate suffering and sickness and aid in restoring health. However there is justification for criticism of many of the preparations that are being offered to the medical profession for their prescribing. As is well known many of the preparations are simple mixtures of U. S. P. or N. F. preparations, given a name and made popular by detailing and the mailing of tons of literature to physicians.

By the increasing use of these preparations the pharmacist cannot obtain the proper compensation for prescription work, and greatly discourages him in aspiring to do true practice.

The prices most always are exorbitant for the

specialty and this makes prescription pricing much higher than if U. S. P. or N. F. prescriptions were prescribed, and then the pharmacist's profit is much less than he should receive.

I have taken several of the popular specialties whose formulæ are known and made a comparison as to the cost the pharmacist pays for them and the cost they can be made for by the pharmacist.

- No. 1. Cost to purchase \$1.27—to make 19c.
- No. 2. Cost to purchase \$2.78—to make 67c.
- No. 3. Cost to purchase \$1.23—to make 21c.
- No. 4. Cost to purchase \$2.72—to make 94c.
- No. 5. Cost to purchase \$3.00—to make 48c.
- No. 6. Cost to purchase 1 oz. bot. 48c—to make 58c pt.
- No. 7. Cost to purchase \$3.44 oz.—to make 44c oz.

All these preparations can be prepared in any pharmacy excepting one—an assayed Tincture and this is given to show the price we pay for its being furnished in 1 oz. bottles.

What is the cause of the increasing production and use of the specialties? Is it because the pharmacists individually and in their associations are not making an effort to combat the evil? For evil it is in many respects and from several angles aside from the unprofitable prescription work that it causes.

The laity is forming the habit of self medication which in itself is often a rather dangerous procedure, and also retards the physician's services.

Are the pharmaceutical houses trying and in many instances convincing physicians the pharmacist cannot prepare preparations as nearly perfect as can be done in large laboratories?

Cost of the preparations being detailed to physicians is seldom mentioned, but when it is, the impression that is desired to be made is they are in keeping with official preparations, prepared by the pharmacist. As an illustration of this a physician was advised by a detail man that his preparation cost no more than peppermint water to use as a vehicle, but in reality the preparation being detailed cost \$7.50 per gallon. Although that was the work of an individual, possibly unscrupulous, the effect is the same regardless of the source, as to the impression created.

Not only is the pharmacist compelled to carry

the wide variety of preparations, but the different strengths and combinations, that are produced. They compel him to have invested in capital and space an unnecessary investment in each. Various strengths of tablets and percentage solutions are unnecessary, multiples of tablets would produce a desired dose, and simple dilution of a percentage solution the desired strength, and that would not compel the carrying of unnecessary stocks.

One particular preparation that has become extremely popular with us recently, but took us 3,000 years to discover its efficiency, is being made by most every large manufacturer and in from 20 to 25 different strengths and combinations and each specified by the different physicians, when several would be ample to meet every condition. The pharmacist is being converted into a dispenser rather than a compounder, by this class of prescribing physicians and in many instances it is questionable if the results are as satisfactory as if he relied on the official preparations.

In some sections much progress is being made where efforts are exerted to make more popular the preparations of the U. S. P. and N. F. Individually accomplishments are limited, but by associations and organizations taking a greater interest in the work, improved conditions may be brought about.

When possible to have some one attend medical meetings, who is capable of talking to physicians on the advantages of the use of U. S. P. and N. F. preparations is good propaganda and is certainly a worth-while effort.

If a closer co-operation of the American Pharmaceutical Association and National Association of Retail Druggists with the American Medical Association could possibly be brought about it would be a great benefit to pharmacy.—*Maryland Pharmacist*, May, 1931.

Heads or Tails?

Wilmington, Del., May 16-31.

Dr. _____.

Received your call at — Kirkwood St. and would like to know what you are going to do about it, as she is going to St. Francis Hospital with a lump in her head, but not at the General Hospital where you get the chair.

Kindly obey orders.

CATHARINE _____.

(Ed. Note—The lady was out of her head.)

WOMAN'S AUXILIARY

Panoramic View of the Woman's Auxiliary to the A. M. A. in Four Articles

4. Western District

MRS. JAMES F. PERCY

As my division in the organization work covers the states of the far West, branching to the middle states only to include Nebraska, this panorama will begin there. We have been enjoined for so many years to "Go West," it has now become a favorite direction of travel.

Nebraska is always up and doing and a survey of activities of 1931 shows an extensive distribution of the national Auxiliary study envelope on communicable disease control; much welfare work, especially providing professional visiting nurses for public schools in various counties, and definite organization of county relief work at a great saving to the County Commissioners. Here indeed is a far-reaching benefit for the community-at-large in a practical, economic way. Benefits are held to procure funds for completing files of scientific books and magazines and research work of the pathological laboratory connected with the Sharp Building Library at Lincoln. The Auxiliaries' scientific educational programs contain many important names, these together with social and philanthropic activities keep everyone interested, useful and happy. One new county auxiliary has been reported as a last gift to this administration.

Colorado has kept up the interest aroused during the national presidency of Mrs. F. P. Gengenbach of Denver, particularly with spreading ideas of good and better health through the use of literature in the less populated districts. Included with this, study envelopes have been used and a greater field developed for approved health programs in other organizations. Growth in numbers has not been sought so much as growth in achievements.

Wyoming must be passed as having been silent to all requests for even a hint as to its status. Geographically, Wyoming and Utah are difficult of organization but within the few years that lie ahead, they are certain to be caught in the vibration already swinging its way throughout the land and they cannot long be resistant to its call, we are sure. Utah has already given expression, through her women visiting other states, that she is ready to take action to further a properly organized Auxiliary.

New Mexico, with but one county, Bernalillo, organized and far from all centers of activity, has been an inspiration by their efforts to follow the national precepts. Unless one has traveled the great spaces of the deserts of the southwest, no conception of its distances can be formed. This one county has taken up child welfare work, sale of tuberculosis seals, enjoyed programs from their medical men, county charities' chairman, county health nurses, and state director of public health, and carried the social activities of the state medical convention. They are few in number, but verily the leaven quickeneth the whole loaf.

Arizona has trebled its units from one to three but has found organization work difficult due to distances. Social features have prevailed unless some definite need has loomed in the offing, such as the Basic Science Bill, for the passage of which the state Auxiliary made great effort. In a state so filled with cults the passing of the bill by the Senate was a real achievement, even though it was finally held up in committee. However, nothing daunted, the members are now aroused to the possibilities and usefulness of an Auxiliary, and experienced women are stepping forward, willing to serve and assist in making an active, worth-while organization.

California has been concerned, aside from organization, with establishing itself upon a permanent foundation through a proper constitution and has been able to do this with the full support of the California Medical Association, who are printing these constitutions as a gift to the state Auxiliaries.

At the recent state meeting, held in San Francisco, April 27-30, 165 women registered, with 55 delegates and 115 women seated at the annual luncheon. The Auxiliary now feels safely established and on its keel.

The keynote of each county report was education, but the social side, welfare work, Red Cross, changing the position of a state senator, creating sentiment for a tuberculosis sanatorium, local philanthropies, all had their places with the scientific programs. A chart, "The Technique of Following a Bill Through the Legislature," provided a most unique, striking, and valuable object lesson of information as to what we are all up against in our legislatures and their procedure. This subject is highly recommended to all organizations.

A resolution was introduced and adopted and

directed to the national "Committee on the Cost of Medical Care," asking for a change in the name under which the committee functions to one more in accord with the facts they are studying, namely: "The High Cost of Illness or Sickness." The original name implies some fault of the medical profession, while the proposed name is inclusive of all the various factors involved in the problem. A copy has been sent to the national Auxiliary asking their indorsement of said resolution at the Philadelphia convention. The California Medical Association is presenting a similar resolution to the House of Delegates, A. M. A., whose membership now closely approaches 90,000.

The interest shown and the friendliness in the social life at this convention demonstrated a new order which we hope has come to stay.

Oregon has chiefly concentrated upon organization work and revival of general interest this year, through providing the units with a list of suggested study topics to encourage a similarity of subjects. Portland has monthly meetings with speakers who use the material contained in the study envelopes and are extending their educational and philanthropic interests as well. Temporary organization in one county is hoped to soon become permanent, thereby increasing their number and justifying the work of the state officers.

Washington is showing great interest to become organized, and after considerable correspondence it has been deemed best to have the primary action come through the state medical meeting which takes place soon after the Philadelphia convention. We feel it is safe to prophesy that Washington will be on the list of organized states for our successor.

Idaho is listed as an organized state but as all letters have remained unanswered the panorama must end here.

To those who were fortunate enough to attend the national meeting at Philadelphia, no further stimulus will be needed.

Each state will be eager to carry out the aims and ideals of the parent organization.

We learn from those who have achieved, and in Pennsylvania the accomplishments of the Auxiliary, together with their complete plan for the national convention, will give a wide understanding of a still greater organization, and insure a generally more important recognition in the days to come.

MISCELLANEOUS

One Reason Why Patent Medicine Vendors Thrive

(Parody upon a Hospital Staff Meeting, submitted by one of our members who vouches for the truth of the essentials and declares this actually happened in one of New Jersey's large cities.)

A typewritten card came to Dr. Deutsch's office: Consultation—meeting at the General Hospital on Tuesday, February 17, at 9 p. m. Subject: Obscure conditions of the liver.

These consultation-meetings were held once a month in accordance with the regulations of the College of Surgeons.

Primarily, they were held to discuss cases treated in the hospital in which a fatal ending had not been averted.

But even the doctors do not like to hear of death more than they have to—so, in our hospital the Committee on Program was obliging and tried to offer something of interest to nearly everybody.

The evening of the seventeenth of February was given over by the chairman to a doctor who presented 4 patients, all males, whom he, to the best of his ability, had cared for until such time as surgical intervention seemed the only way out. In his zeal to make the evening attractive he had asked all 4 men whose cases were to be discussed to be present at 9 o'clock to show that they were very much alive.

The doctor exhibiting these patients was of the antediluvian type; he still sported the mustache and goatee so popular a quarter of a century ago, and it was only recently that he had changed from an open-air horse-drawn vehicle to a closed automobile—a Ford. He still prescribed Lloyd's Specifics, Echinacea, and other remedies of which he did not know the composition; but he could tell stories entertainingly, and all grandmothers liked him because he never "queered" them in their use of poultices or home-remedies.

He had easy-going manners and a laugh resembling the exuberance of a goat.

He was a strictly *medical man*, not a surgeon.

Dr. Pushemover, whom he had asked to operate on his patients, was also present.

Dr. Goatee opened the meeting: "Gentlemen, we have here present with us 4 patients who have been operated on in this hospital. The first, Mr.

Hiram Bunk, was here—let me see—was it in 1928—that's right?" "Yes," said Mr. Bunk, "I was operated on June 21, 1928."

"And are you entirely well?" asked the doctor.

"I was never better in my life," answered Mr. Bunk.

"Gentlemen," spoke the goateed doctor, "tonight Mr. Bunk is celebrating the twenty-fifth anniversary of his wedding to one wife and I think, on a day like this, we ought to excuse him." Exit Mr. Bunk.

The second victim of surgery was then presented. He, too, stated that he was well—and so did the third and fourth patients. They were excused and allowed to depart.

Now came the interesting part of the evening—discussion of the state of the livers of these patients who had really never been made acquainted with what ailed them. Dr. Goatee read all the data from the charts—it took him a long time to search through the records to find what he wanted but at last, with infinite patience, he was able to tell the audience what, in his opinion, each patient was *not* suffering from.

One of the men, Mr. Liverwell, had been sick quite some time with fever and jaundice; there was no end to the fever and notwithstanding the quinin and the Lloyd's Specifics given to him, the man did not improve.

Dr. Goatee decided to call a consultant. This eminent doctor, living in New York City, would condescend to come to our town for \$500. That was too much. Another consultant telephoned to say he would come out for \$100. His fee was agreed to.

After examination, this New York specialist said: "Do you know what you have there? An abscess of the liver. You'll have to take him to the operating room."

"If the man is willing, will you operate on him?" asked Dr. Goatee.

"Certainly," replied the consultant, "but that will be \$150 extra."

The man was willing. The consultant opened the abdomen, saw nothing abnormal with the liver, and proceeded to pierce that organ with long needles in direction perpendicular, oblique and transverse, but no pus was found. The operator finally gave it up as a bad job and closed the abdomen. The patient's temperature after operation remained the same as before—around 101° in the morning and 103° in the afternoon—but after some 4 weeks or more the temperature

dropped to normal and gradually the man got well.

Mr. Bunk's case excited the most interest. After nearly a year's ailment, with lack of appetite and a slight pain over the liver region, he developed a fever which arose sometimes to 104°. Dr. Goatee, who saw that the man was jaundiced, thought that he was possibly suffering from gallstones, and with this idea in mind he called in Dr. Pushemover who agreed with him and suggested an operation.

At operation the gall-bladder was opened but no stones were found. The liver was enlarged about 2 finger-breadths; there was no tumor, but some peculiar spots, white, and of the size of a pin-head, were present on the liver's surface.

Dr. Pushemover, who was a protégé of the Hospital's Board of Governors, perhaps wasn't quite as experienced in dealing with livers as he should have been. He had never seen a liver with spots like those of his patient. He therefore called them *cancer*—which was a risky thing to do because time would ultimately prove him right or wrong. Anyway, it was then declared to be cancer and the patient was sewed up and put back to bed.

The fever continued as before but, strange to say, Mr. Bunk recovered in about 8 weeks notwithstanding the operation. His disease condition had been called *cancer*, and the family had been told. A drowning man catches at straws, and this patient, made aware of his condition, wrote to Muscatine, Iowa, for information regarding a certain Cancer Specialist.

The most interesting part of the meeting was now to begin. Dr. Goatee had presented his cases—all 4 patients had come to operation but the operations had not cured them—all 4 had continued to have high temperatures for weeks until at last nature, or their own resistance powers, had put them back on their feet.

The Chairman of the meeting announced that the report was open for discussion.

A surgeon of the staff asked whether a piece of liver tissue had been removed for examination, from the man who was supposed to have had cancer.

"No," answered Dr. Pushemover.

"Why, then, was the condition diagnosed as cancer?"—asked the Staff Surgeon.

"We supposed that those white spots on the surface of the liver were metastases from cancer

in some other parts, but evidently we were wrong."

Another doctor spoke up and said that he could not understand how a diagnosis of cancer could have been made if the temperature curve had been taken into consideration—he had never seen a cancer of the liver exhibit that particular curve, which looked more like a septic temperature record than anything else.

Another man arose and said: "I am very glad that this case of supposed cancer has come up for discussion. I have often wondered if this man Bunk, whom everybody in this town seems to know, really had a tumor or a cancer at the time of his operation. The facts of the case have now come to light. Whenever I see a case of cancer, in my practice, someone invariably mentions Hiram Bunk, who, as the whole town is told, 'has been cured of cancer by taking patent medicine after the doctors who had operated on him, had given him up to die.' I am, and always have been, thoroughly disgusted when hearing the praises of this patent medicine, knowing well enough that no such medicine has ever yet cured real cancer. I listen to the talk of superstitious gullible people, but it is a conundrum to me how a certain doctor on the staff of this hospital, and who is also a member of the American Medical Association, can be so naive as to advocate use of that patent medicine because it is said to have cured Mr. Bunk. What is more, there is also a nurse in this hospital who recommends this medicine to all victims within her reach.

"And now, I will read to you, from the Cancer Specific booklet, Mr. Bunk's testimonial.

To whom it may concern:

I was operated upon on June 21, 1928, for a gall-bladder condition but the surgeon found an advanced cancer of the liver. After the shock of the operation had passed, I started to take your Cancer Specific and have continued it right along. I now feel better than I have for years. All signs and symptoms of the condition seem to have passed away. Hardly a week goes by but what I have 2 or 3 inquiries about your medicine and I heartily recommend it to all.

Yours very truly,

Hiram Bunk."

Dr. Pushemover made himself as small as possible. He was evidently embarrassed. Bunk's cancer medicine sold like hot cakes in the town, because of the living testimonial walking the

streets "after 2 able doctors had condemned him to die of cancer."

Another man got up and said: "Not only does a doctor recommend this medicine but we have in our midst a minister of the gospel who thinks he is very close to our Heavenly Father—and he, too, 'knows that Bunk has been cured by the Cancer Specific' and he tells all the members of his congregation that it is foolish to call in a doctor in any case of cancer."

On motion, the meeting was adjourned and the refreshments brought in.

The refreshments consisted of coffee, diminutive sandwiches and heavy slices of ice cream with cream puffs, lady fingers and chocolate-coated sweet things.

"How can you sleep?" asked the President of the Staff of Dr. Deutsch, "after a cup of strong coffee?"

"I am a Dutchman," said Dr. Deutsch, "I am a drinker, but not an eater—for instance, I don't eat ice cream—I don't touch those dou-dahs in which you are so interested, but I like my cup of coffee."—*Jour. Med. Soc. of N. J.*, May, 1931.

Treatment of Trichomonas Vaginalis Vaginitis

J. P. Greenhill, Chicago (*Journal A. M. A.*, May 30, 1931), states that Trichomonas vaginalis vaginitis is a fairly common condition among pregnant and non-pregnant women. Its chief symptom is a profuse vaginal discharge, which in about half the cases is associated with burning or itching sensation in the vagina and on the vulva. Frequently the discharge has a very disagreeable odor. The vaginal mucosa is usually orange-red and roughened; in the vagina a profuse, greenish yellow, foamy, purulent discharge is found. The simplest way to study and to identify the trichomonas organisms is by means of fresh hanging drops or drops diluted with salt solution. In the fresh hanging drop the organisms are easy to detect because they are in constant motion. The treatment that the author is using at present consists of scrubbing the vulva and vagina with tincture of green soap, washing out the latter with mercuric chloride or tap water, applying hexylresorcinol to all parts of the vagina and vulva, and inserting tampons saturated with glycerin into the vagina. This treatment is repeated every two days until two consecutive hanging drops fail to show the trichomonas. Since recurrences are frequent, especially after a menstrual period, patients should be re-examined immediately before and just after the menstrual period, following the course of treatments. If trichomonas organisms are found, the treatment should be repeated.

Friends Declare War on Cancer

War was declared at the session of the Philadelphia Yearly Meeting of Friends, but war of a kind entirely in keeping with the traditional peace principles of the Friends. Announcement was made by Charles F. Jenkins of Philadelphia, treasurer of the Board of Trustees, in giving the annual report on Jeanes Hospital, Fox Chase, Pa., that the board had yesterday purchased two additional grams of radium at a cost of \$120,000 to add to the present supply in use at the hospital. The hospital, built and equipped in 1928 at a cost of over \$1,000,000, specializes in the diagnosis and treatment of cancer. It was founded and endowed by the will of Anna T. Jeanes, a prominent member of the Society of Friends, whose benefactions covered many phases of philanthropic work. The hospital, however, is non-sectarian, although managed by a Board of Trustees selected from the members of the Philadelphia Yearly Meeting of Friends.

The present appropriation of the Board of Trustees also provides for the establishment of radium emanation apparatus, and additions to the technical staff to enable the hospital to make the most effective use of its radium supply, which, with the amount just purchased, is said to be one of the largest in the Philadelphia area and to be exceeded by that of only a few institutions in the country.

BOOK REVIEWS

Nutrition and Diet in Health and Disease. By James S. McLester, M. D., Professor Medicine, University of Alabama. Second edition. Pp. 891. Cloth. Price, \$8.50. Philadelphia: W. B. Saunders Company, 1931.

This is a scholarly work, that represents a critical digest of a tremendous amount of the literature of the subject. Since the first edition appeared four years ago there have also appeared four additional printings, ample proof of the fact that the scholarship has been widely appreciated.

The new edition brings the subject up to date, with considerable revision of such items as vitamins, deficiency diseases, diabetes, gout, etc. New material includes the toxemias of pregnancy, food poisoning, irritable colon, and protozoan diseases. The section on enzymes, protein requirement, epilepsy, and diseases of the blood have been re-written.

As in the former edition, a great deal of space has been given to physiology and to the other

basic sciences, but the discussions are so admirably presented that instead of padding the book unnecessarily they add materially to its value. The style is most readable. Dr. McLester finds a kind word for bran—Dr. Wm. Gerry Morgan does not. Dr. McLester, we believe rightly, says the diabetes following obesity is caused by a lipomatosis of the pancreas. Nowhere, however, do we find a consideration of the special dietary requirements of the Jewish or other religions. The book has no illustrations, but has an abundance of recipes, dietaries, and tables; in fact Part III consists wholly of tables. This work is one of the outstanding texts on its subject.

Chemistry for Nurses. By Harry C. Biddle, A. M., Instructor in Chemistry, School of Nursing, Western Reserve University. Pp. 338, with 74 illustrations. Fabrikoid. Price, \$2.75. Philadelphia: F. A. Davis Company, 1931.

An excellent text for the training school, telling the nurse all she need know about chemistry, and a whole lot more. The style is clear, the illustrations helpful, and the experiments well selected. For its purpose, this is an admirable book.

The Treatment of Injury by the General Practitioner. By Clay Ray Murray, M. D., Assistant Professor of Surgery, Columbia University. Two volumes. Pp. 412, with 196 illustrations by the author. Cloth. Price, per set, \$5.00. New York: Harper & Brothers, 1931.

This is a welcome addition to the series of Harper's Medical Monographs, all of which are written for the general practitioner. This work is remarkably complete and up to date, (e. g., the author prefers intravenous glucose for cerebral dehydration) and the methods of treatment proposed are practical and conservative. Diagnosis, very properly, receives small space. The generous use of italics in the text makes it more available for quick reference. The work is a very dependable guide for the general practitioner.

Diabetes: Its Treatment by Insulin and Diet. By Orlando H. Petty, M. D., Professor of Diseases of Metabolism, Graduate School of Medicine, University of Pennsylvania. Fifth edition. Pp. 224, with 13 illustrations. Cloth. Price, \$2.00. Philadelphia: F. A. Davis Company, 1931.

This is a primer for the patient, and a rather complete one, containing brief chapters on foods, diets, insulin, and its injection, testing of urine, etc. Recipes are included, as well as dietaries for Jewish patients, which latter, however, are not indexed. The book makes no pretense of supplanting the physician: it can be recommended highly to the layman who needs it.

